

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
28 July 2005 (28.07.2005)

PCT

(10) International Publication Number
WO 2005/069231 A1

(51) International Patent Classification⁷: G07D 7/12, 7/00

(21) International Application Number:
PCT/GB2005/000173

(22) International Filing Date: 17 January 2005 (17.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0400984.1 16 January 2004 (16.01.2004) GB

(71) Applicant (for all designated States except US): DE LA RUE INTERNATIONAL LIMITED [GB/GB]; De La Rue House, Jays Close, Basingstoke, Hampshire RG22 4BS (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): REID, Duncan, Hamilton [GB/GB]; 47 Ravel Close, Basingstoke, Hampshire RG22 4ED (GB). PAYNE, Gerald, Sidney [GB/GB]; 11 Northmead Close, Midsomer Norton, Radstock, Bath, North East Somerset BA3 2SG (GB). HOWLAND, Paul [GB/GB]; 71 Springfield Close, Andover, Hampshire SP10 2QR (GB). HENDERSON, Peter, Mclean [GB/GB]; 31 Wellow Drive, Frome, Somerset BA11 2DN (GB).

(74) Agents: BUCKS, Teresa, Anne et al.; Boulton, Tennant, Verulam Gardens, 70 Gray's Inn Road, London WC1X 8BT (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

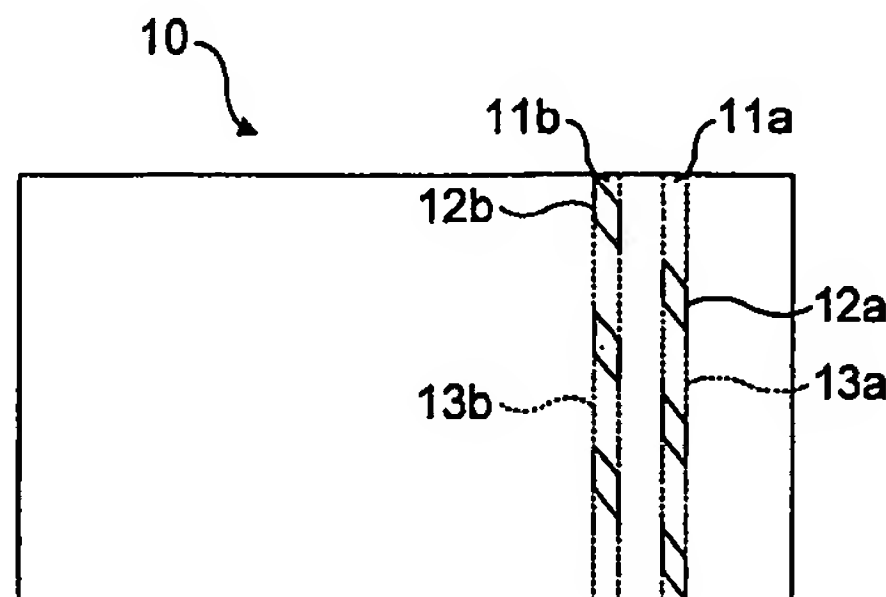
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ,

[Continued on next page]

(54) Title: SECURITY SUBSTRATE INCORPORATING ELONGATE SECURITY ELEMENTS



(57) Abstract: The present invention is concerned with providing security substrates, and documents made therefrom, such as banknotes, with features for visual inspection by members of the public. More specifically the invention relates to a novel security substrate containing at least two elongate security elements for the purposes of public and non-public verification. The security substrate comprises a substrate and at least two elongate security elements each having a width of less than or equal to 6mm. The security elements are at least partially embedded within the substrate and running substantially parallel to each other with a gap therebetween of no greater than 10mm. The total cross-directional width of a zone occupied by the two security elements and the gap is less than or equal to 18mm.



NA, SD, SL, SZ, TZ, UG, ZM, ZW), *Eurasian patent* (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), *European patent* (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), *OAPI patent* (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.